## Disaster Management Support: An India – United States Collaboration

#### Facts:

- India has been very vulnerable to natural hazards.
- The Orissa cyclone in 1999 and the Gujarat earthquake in 2001 together killed more than 22,000 people and damaged more than 3 million houses.
- Most destruction and loss of life is caused by weather-related events.

## **Bilateral Response:**

Expanded cooperation between the U.S. and India in science and technology related to disaster management is underway with the joint launch of a \$16 million, five-year effort of the U.S. Agency for International Development (USAID) and the Ministry of Home Affairs (MHA), Government of India. The Disaster Management Support (DMS) activity supports the GOI's multi-hazard, multi-disciplinary approach to disaster management, and draws in new U.S. partners to share American experience and expertise to mitigate disasters. This is the result of a shared vision between the U.S. and India.

New U.S. partners working with the Ministry of Home Affairs include the Federal Emergency Management Agency (FEMA), now part of the Department of Homeland Security, the U. S. Forest Service, the National Oceanic and Atmospheric Administration (NOAA), and the U. S. Geological Survey (USGS). The effort focuses on the following national, state and local activities.

### **Incident Command System:**



The U.S. and India are sharing technology to improve disaster response. The sudden nature or sheer magnitude of a disaster can throw response mechanisms into disarray. The U.S. Forest Service is working with MHA to institutionalize training in the Incident Command System (ICS) so that response management is professional. The ICS provides a method for disaster response professionals to respond to complex incidents – earthquakes, floods or even terrorist attacks – by

adopting a team of trained professionals to handle the response. A course on the ICS is being made a part of the instruction at India's premier Lal Bahadur Shastri National Academy of Administration, where new recruits to the Indian Administrative Services and other central services are trained.

### **Early Warning:**



U.S. and Indian scientists will be looking at early warning systems for weather-related disasters such as floods, cyclones or droughts.

Collaborators include the NOAA and USGS from the U.S., the Indian Meteorological Department (IMD), the National Center for Medium Range Weather Forecasting (NCMRWF), and the Central Water Commission (CWC), among others.

# **National Support for Local Emergencies:**



Exchanges between the U.S. FEMA and MHA will focus on such disaster mitigation approaches as developing earthquake resistant building by-laws, cyclone tracking and monitoring, and guidelines for hazardous materials, among other activities. The MHA and FEMA will collaborate on business and industry preparedness, the start-up of emergency operations centers and setting standards for emergency decision making.

### **Community Preparedness and Response:**



In addition, a \$4 million grant to the United Nations Development Program (UNDP) from USAID will help carry-out community-based disaster planning in high-risk areas of India – 20 multi-hazard prone districts of Orissa, Gujarat, West Bengal, Uttaranchal and Assam. The effort is part of a larger disaster risk reduction program led by MHA. Communities and states will prepare action plans that define what to do and where to go when a disaster strikes. Planners keep in mind the special needs of women, children and other

vulnerable groups in disaster situations. Informed communities can assist relief operations, ensure supplies reach the neediest first, and demand accountability for relief measures. Over 40,000 volunteers will receive information; 250,000 trained disaster management teams will be formed; and information centers will be set up in 17 field locations to raise community awareness.

**Photos (in order of appearance):** Indian officials learn about urban search and rescue equipment in California; credit: U.S. Forest Service/Laura Chapman. Orissa floods; credit: USAID. Aftermath of Gujarat 2001 earthquake; credit: CARE/Anne Heslop. Village homes are mapped to boost emergency response; credit: UNDP.